Lesson Overview

Students will learn about fruits and vegetables, eating a rainbow of fruits and vegetables. Fruits and vegetables come in a variety of colors, different colored fruits and vegetables offer different benefits to the body. Finally, students will explore where different fruits and vegetables grow.



Lesson Objectives

- » Name your favorite fruits and vegetables.
- » Understand the importance of eating a variety of fruits and vegetables.
- » Identify how fruits and vegetables grow.

Arizona Department of Education (ADE) Academic Standards

Math Standards

Kindergarten

K.C.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

First Grade

1.G.3 Partition circles and rectangles into two or four equal shares, describe the shares using words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Second Grade

2.G.3 Partition circles and rectangles into two, three or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.



English Standards

Kindergarten

- K.RL.1, K.RI.1 With prompting and support ask and answer questions about key details in a text
- K.RI.4 With prompting and support, ask and answer questions about unknown words in a text.
- K.SL.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- K.SL.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- K.L.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
 - d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).
- K.L.5 With guidance and support from adults, explore word relationships and nuances in word meanings.
 - a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

First Grade

- 1.RL.1, 1.RI.1 Ask and answer questions about key details in a text.
- 1.RI.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
- 1.SL.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- 1.SL.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
- 1.L.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
 - d. Use personal, possessive, and indefinite pronouns (e.g., *I, me, my; they, them, their; anyone, everything*).



- e. Use verbs to convey a sense of past, present, and future (e.g., *Yesterday I walked home; Today I walk home; Tomorrow I will walk home*).
- 1.L.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.
 - a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.

Second Grade

- 2.RL.1, 2.RI.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- 2.RI.4 Determine the meaning of words and phrases in a text relevant to a *grade-2 topic or subject area*.
- 2.SL.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- 2.SL.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- 2.L.1 Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
 - d. Form and use the past tense of frequently occurring irregular verbs (e.g., *sat*, *hid*, *and told*).
- 2.L.5 Demonstrate understanding of word relationships and nuances in word meanings.
 - a. Identify real-life connections between words and their use (e.g., describe foods that are *spicy* or *juicy*).

Advanced Preparation

- ✓ Make sure Powerpoint and projection is set up; bring up PowerPoint Presentation via website.
- ✓ Plan for handouts or possible activity items.



Materials and Equipment

- ✓ MyPlate poster
- ✓ MyPlate handouts (for student)
- ✓ Food Models (optional for demonstration)
- ✓ School Lunch Menu (optional print off from school website for discussion)

Incentive Gifts

- » MyPlate Activity Books
- » Pencils
- » Colored Pencils
- » Bookmarks
- » Stickers
- » Silly Food Group Eye Glasses
- » Hacky sacks or Frisbees
- » Beach Ball
- » Recipes
- » Fun Food News

Please contact us to see if you are eligible to receive some of these and other incentive gifts.

Estimated Time

30 minutes for PowerPoint, additional time for the activities.

Presentation

This lesson plan is designed to help assist you and students in identifying fruits and vegetables, encouraging a variety of fruits and vegetables and learning about how fruits and vegetables grow. Below are the notes from each slide within the Fruit and Vegetable Powerpoint. It is designed to be adaptable for grades Kindergarten through 2nd grade.

Slide #1

- Q.) Today we are going to find out what it means to eat a rainbow!
- Q.) Has anyone ever seen a rainbow before?
- Q.) What colors are in the rainbow?
- Q.) Do you think it is possible to eat a rainbow?



A.) Yes, it is possible to eat a rainbow- a rainbow of fruits and vegetables! Fruits and veggies come in all colors! We want to eat all colors of the rainbow to grow to be healthy!

Slide #2

Today we are going to have fun talking about fruits and vegetables!

We will be naming different fruits and vegetables and why we want to eat a rainbow of fruits and veggies. We will then explore where different fruits and veggies grow.

Slide #3

So let's begin learning about fruits and veggies!

Slide #4

MyPlate was created to help us understand what foods we should be eating to be our best.

It suggests to make half your plate fruits and vegetables!

The color red on MyPlate is for fruits. The color green is for vegetables.

Slide #5

- Q.) Can anyone name a fruit?
- A.) Accepts all fruit answers.

Slide #6

- Q.) Does someone want to share their favorite fruit?
- A.) Accept all fruit answers.

Slide #7

- Q.) Can anyone name a vegetable?
- A.) Accepts all vegetable answers

Slide #8

- Q.) Does someone want to share their favorite vegetable?
- A.) Accept all vegetable answers.

Slide #9

Optional: Have the kids draw their favorite fruit and/or vegetable.



Slide #10

So let's find out why we should eat a rainbow of fruits and vegetable!

Slide #11

Who here wants to do better in school? Fruits and vegetables help us to learn so we can! These foods give us energy to pay attention, read better, and do well on tests.

Slide #12

Fruit and vegetables also give us more energy to play our favorite games with our friends.

- Q.) What are your favorite activities to play that get you body moving?
- A.) Looking for activities that promote physical activity such as riding bike, swimming, playing tag, etc.

Slide #13

Fruits and vegetables also help us not to get sick! I'm sure there isn't anyone here who likes to get sick!

Fruits and vegetables give us vitamin C. Vitamin C helps our bodies to stay healthy.

Slide #14

Fruits and vegetables also keep our eyes healthy! Who here is learning to read? Fruits and vegetables are going to help you have healthier eyes which will help you be a better reader!

Slide #15

Fruits and vegetable contain fiber. Fiber acts as a scrub brush cleaning out our "digestive tract." I like to call the digestive tract the "food tube." A healthy food tube helps us to feel better and helps our bodies use the food we eat.

Slide #16

Fruits and vegetables also help our hearts stay healthy. We need a healthy heart so we can run around and play. A healthy heart pumps blood through our bodies to give us energy to move and to help our brains think.

Slide #17

Fruits and vegetables are cool because they keep us healthy! Who here thinks it is cool to eat fruits and veggies?



Slide #18

No notes, just a picture

Slide #19

Fruits and vegetables come in all different colors!

Slide #20

There are many fruits and vegetables that are red. Can you name some fruits and vegetables that are red?

Slide #21

There are many fruits and vegetables that are orange. Can you name some fruits and vegetables that are orange?

Slide #22

There are many fruits and vegetables that are yellow. Can you name some fruits and vegetables that are yellow?

Slide #23

There are many fruits and vegetables that are green. Can you name some fruits and vegetables that are green?

Slide #24

There are many fruits and vegetables that are blue. Can you name some fruits and vegetables that are blue?

Slide #25

There are many fruits and vegetables that are purple. Can you name some fruits and vegetables that are purple?

Slide #26

There are many fruits and vegetables that are white. Can you name some fruits and vegetables that are white?

Slide #27

Has anyone been to the part of the grocery store where you find fruits and veggies?

Where do you think those foods came before they got to the grocery store?



How do they grow? Let's find out!

Slide #28

Some fruits grow on trees.

Has anyone seen an orange tree or a lemon tree or a lime tree? Arizona has a lot of these kinds of trees.

Apples, peaches, plums, bananas, pineapples, cherries are other examples of fruits that grow on trees.

Slide #29

Lots of vegetables grow underground.

What two veggies do you see here that grow under the ground?

Carrots, radishes, onions, potatoes, beets, and turnips are all examples of vegetables that grow underground.

Slide #30

What vegetable do you see here?

Corn grows on a stock. Beans also grow on a stalk.

Slide #31

Lots of fruits and vegetables grow on top of the ground.

Cabbage, lettuce, broccoli, cauliflower, asparagus, peppers, eggplants and peppers are all examples.

Slide #32

Other fruits and vegetables grow on bushes.

Blueberries and other berries grow on bushes.

Slide #33

Fruits and veggies also grow on vines.

What fruit do you see here?

Grapes, kiwis, tomatoes, cucumbers, and pumpkins are all examples of fruits and vegetables that grow on vines.



Slide #34

Name the fruits and vegetables you see in this picture.

Alternative activity: Find the tomato, the apple, the grapes, etc...

Slide #35

Who here is excited to try new fruits and vegetables? Try to eat different ones so that you eat all colors of the rainbow!

You will find fruits and vegetables in the lunches schools serve. Give them a try!

Next time you are at the grocery store pick out a new one that you have never eaten before.

Be healthy, do well in school, and have fun!

Background information

You may want to read this section before presenting to give yourself a little more information about the slides and lesson plan.

Below is some information from MyPlate and Fruits and Veggies More Matters to increase your knowledge of fruits and vegetables.

Vegetable:

Any vegetable or 100% vegetable juice counts as a member of the Vegetable Group (green group). Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed. Vegetables are organized into 5 subgroups, based on their nutrient content, the darker the vegetable the better.

Eating vegetables is important because they provide vitamins and minerals and most are low in calories. Vegetables are naturally low in fat and calories, none have cholesterol. Vegetables are important sources of many nutrients, dietary fiber, vitamin A, and vitamin C. Vitamin A keeps eyes and skin healthy and helps to protect against infections. Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Vitamin C also aids in iron absorption.

Fruit:

Any fruit or 100% fruit juice counts as part of the Fruit Group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed.

Eating fruit provides health benefits just like vegetables. People who eat more vegetables and fruits as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases.



Fruits provide nutrients vital for health such as dietary fiber, and vitamin C. Most fruits are naturally low in fat, sodium, and calories. None have cholesterol. Vitamin C is important for growth and repair of all body tissues, helps heal cuts and wounds, and keeps teeth and gums healthy.

Discover the many benefits of adding vegetables and fruits to your meals. They are low in fat and calories, while providing fiber and other key nutrients. Most Americans should eat more than 3 cups—and for some, up to 6 cups—of vegetables and fruits each day. Vegetables and fruits don't just add nutrition to meals. They can also add color, flavor, and texture.

Key message: Remember; make half your plate fruits and vegetables.

Healthy reasons to eat a rainbow of colorful fruits and vegetables

Red fruits and vegetables contain natural plant pigments called "lycopene" or "anthocyanins." Lycopene in tomatoes, watermelon and pink grapefruit, for example, may help reduce risk of several types of cancer. Anthocyanins in strawberries, raspberries, red grapes and other fruits and vegetables act as powerful antioxidants that protect cells from damage. Antioxidants are linked with keeping our hearts healthy, too.

These are some examples of the red group:

- Red apples
- Beets
- Red cabbage
- Cherries
- Cranberries
- Pink grapefruit
- Red grapes
- Red peppers
- Pomegranates
- Red potatoes
- Radishes
- Raspberries
- Rhubarb
- Strawberries
- Tomatoes
- Watermelon

Orange/yellow fruits and vegetables are usually colored by natural plant pigments called "carotenoids." Beta-carotene in sweet potatoes, pumpkins and carrots is converted to vitamin A, which helps maintain healthy mucous membranes and healthy eyes. Scientists have also reported that carotenoid-rich foods can help reduce risk of cancer, heart disease and can improve immune system function.

Some examples of the orange/yellow group include:



- Yellow apples
- Apricots
- Butternut squash
- Cantaloupe
- Carrots
- Grapefruit
- Lemons
- Mangoes
- Nectarines
- Oranges
- Papayas
- Peaches
- Pears
- Yellow peppers
- Persimmons
- Pineapple
- Pumpkin
- Rutabagas
- Yellow summer or winter squash
- Sweet corn
- Sweet potatoes
- Tangerines
- Yellow tomatoes
- Yellow watermelon

Green fruits and vegetables are colored by natural plant pigment called "chlorophyll." Some members of the green group, including spinach and other dark leafy greens, green peppers, peas, cucumber and celery, contain lutein. Lutein works with another chemical, found in corn, red peppers, oranges, grapes and egg yolks to help keep eyes healthy.

Some leafy greens, like collards and kale, are particularly rich in calcium, which helps keep your teeth and bones strong and reduces your overall risk for osteoporosis. Calcium also contributes to muscle function and blood-pressure management.

Some examples of the green group include:

- Green apples
- Artichokes
- Asparagus
- Avocados
- Green beans
- Broccoli
- Brussels sprouts
- Green cabbage
- Cucumbers
- Green grapes



- Honeydew melon
- Kiwi
- Lettuce
- Limes
- Green onions
- Peas
- Green pepper
- Spinach
- Zucchini

Blue/purple fruits and vegetables are colored by natural plant pigments called "anthocyanins." Anthocyanins in blueberries, grapes and raisins act as powerful antioxidants that protect cells from damage. They may help reduce risk of cancer, stroke and heart disease. Other studies have shown that eating more blueberries is linked with improved memory function and healthy aging.

These are some examples of the blue/purple group:

- Blackberries
- Blueberries
- Eggplant
- Figs
- Juneberries
- Plums
- Prunes
- Purple grapes
- Raisins

References:

MyPlate: http://www.choosemyplate.gov/

Fruit and Veggies, More Matters: http://www.fruitsandveggiesmorematters.org/

Activities

See activities folder for various age appropriate activities.

